



Modern contraceptive methods and sexual health

Modern kontraseptif yöntemler ve cinsel sağlık

 Esra Sabancı Baransel¹

¹İnönü University, Faculty of Health Sciences, Department of Midwifery, Malatya, Turkey

ABSTRACT

Sexuality is a natural process and need that starts in fetal life and continues throughout life, includes reproduction and sexual satisfaction, concerns not only the genitals but also the whole body and mind, and is affected by the cultural structure of the society and moral factors. Within the scope of this requirement, the health rights of individuals should not be ignored. Reproductive health/sexual health rights are handled within the scope of personal rights. All people have the right to easily accessible and quality sexual health services. In this review; It is aimed to discuss the modern contraceptive methods with special features and to share them in line with up-to-date information.

Keywords: contraception; reproductive health; sexuality

ÖZET

Cinsellik, fetal hayatta başlayıp ömür boyu devam eden, üreme ve cinsel tatmini içeren, yalnızca cinsel organları değil tüm bedeni ve aklı ilgilendiren, toplumun kültürel yapısı ve ahlaki faktörlerden etkilenen doğal bir süreç ve gereksinimdir. Bu gereksinim kapsamında kişilerin sağlık hakları göz ardı edilmemelidir. Üreme sağlığı/cinsel sağlık hakları, kişisel haklar kapsamında ele alınmaktadır. Tüm insanların kolay ulaşılabilir ve kaliteli cinsel sağlık hizmeti alma hakkı vardır. Bu derlemede; özellikli modern kontraseptif yöntemlerin ele alınması ve güncel bilgiler doğrultusunda paylaşılması amaçlanmaktadır.

Anahtar kelimeler: doğum kontrolü; üreme sağlığı; cinsellik

Sexuality and Sexual Health Concepts

Sexuality is a natural process and need that starts in fetal life and continues throughout life, includes reproduction and sexual satisfaction, concerns not only the genitals but also the whole body and mind, and is affected by the cultural structure of the society and moral factors (Kızılkaya Beji & Partovi Meran, 2017). According to the World Health Organization (WHO), sexual health is a state of physical, mental and social well-being in relation to sexuality. sexual health; requires a positive and respectful approach to sexuality and sexual relations, as well as having safe sexual experiences that are free of coercion, discrimination and violence (WHO, 2019).

A sexually healthy relationship is built on shared values and has five characteristics: These are; accommodating, non-exploitative, honest, seeking mutual pleasure, protection against unwanted pregnancy and sexually transmitted diseases (including AIDS) (Bozdemir & Özcan, 2011). Deciding whether and when all persons will have children according to the Declaration of Reproductive and Sexual Rights of the International Federation of Family Planning; have the right to have equal access to reliable and effective family planning methods and to be informed (Newman & Helzner, 1999). In Turkey, as in the rest of the world, the definition of family planning is based on the ability of individuals to have as many children as they want, whenever they want, according to their own means and wishes. It has been reported in studies that factors such as effective, reliable, low cost, easy access and usability of the method are effective in the selection of the Family Planing method (FP). Choosing the most suitable method for couples increases the effectiveness of the FP method and affects their sexual lives

(Kocaöz, Peksoy & Atabekoğlu, 2013). Studies have shown that family planning methods are among the factors affecting sexuality in marriage (Kocaöz et al., 2013; Gabalci & Terzioğlu, 2010).

Frequency of sexual activity and sexual pleasure are positively associated with contraceptive satisfaction. Fear of an unwanted pregnancy is associated with a negative impact on female sexual arousal, especially if her partner does not share the same concern. Although some men do not take responsibility for thinking about contraception, some women express that a partner's shared anxiety can serve to curb any potential negative effects on their ability to feel aroused (Graham, Bancroft, Doll, Greco & Tanner, 2007).

Modern Contraceptive Methods

Hormonal Contraceptives

Hormonal methods are among the most effective contraception practices preferred and used as a family planning method. Hormonal contraceptives are divided into two as estrogen-progestin-containing and progestin-only. Same time; It can be used in oral, injectable, implant and vaginal ring forms. Each form of use can have various effects that affect sexual functions positively or negatively and limit their use (Braun, 2013).

Combined Oral Contraceptives

With the effect of estrogen and progestin they contain; It prevents ovulation, creates atrophy in the endometrial glands and thickens the cervical mucus, preventing the sperm from passing into the uterus and preventing pregnancy. Pregnancy rates after quitting were reported as 83% within six months and 94% within one year. Theoretically, the failure rate is

close to zero (99.9%). However, while the usual use failure rate is 0.1%, the typical use failure rate rises to 0.3% (Sağlık Bakanlığı, 2009).

Injectable Contraceptives

These are birth control preparations that contain estrogen and progesterone hormones together. In the first 15 days of injection, it provides protection due to the hypoestrogenemic environment due to the decrease in plasma estradiol level. It is 99% effective when applied correctly. It is 99% effective when applied correctly (Gönenç, 2007; Sağlık Bakanlığı, 2009; WHO, 2019).

Vaginal Rings

It is a thin, colorless ring that can be self-applied and placed in the vagina. It is an application to create an ovulation pattern within 3 weeks after being placed in the vagina in the first 5 days of the menstrual cycle and outside for 1 week. There are also progestagen-only vaginal rings available. These rings are designed for continuous use and do not inhibit ovulation, and 50% of users have ovulated. These rings can be used continuously for up to 3 months (Kodaz, Altuntuğ & Ege, 2018).

In a study comparing the cycle control, side effects and sexual satisfaction of hormonal contraceptives, it was found that there was an improvement in the menstrual cycle in all cases, and the mood in the oral group users was more negative than the vaginal ring users. It was found that there was more vaginal dryness in oral use compared to those who used vaginal rings, as well as a decrease in sexual desire and desire (Sabatini & Cagiano, 2006). In many studies in the literature, it is stated that there is a significant decrease in the frequency of intercourse, female sexual function index "desire" score, and libido in oral use. However, it was determined that there were improvements in the physical role, body pain, general health, vitality and social functions of women in the use of oral contraceptives (Strufaldi et al., 2010; Caruso et al., 2014; Battaglia et al., 2012; Pastor, Holla & Chmel, 2013).

Transdermal Patch

Contraceptive patches are a method that has a square-shaped geometric structure and acts by spreading the combination of hormones they contain from the skin to the blood, preventing ovulation. It also thickens the cervical mucus and prevents the passage of sperm to the uterus. When used correctly, its effectiveness has been reported to be 99%. In order to prevent irritation that may occur on the skin, it should be adhered to one of the application areas specified in each application. The tape is removed from the package without touching the adhesive surface and placed on the skin for about 10 seconds by applying pressure. For three weeks, a new tape is attached every week and the fourth week is no tape. Thus, no tape is applied for one week per month (Kodaz et al., 2018; Öztürk, Çeber, Karaca Saydam & Soğukpınar, 2004).

The use of the patch was compared with the studies conducted with oral contraceptive users and it was found to be advantageous because it is a method that does not need to be remembered. In oral contraceptives, the intake of the pill requires a daily recall, while contraceptive tapes require a weekly recall. While injections and implants that provide long-term protection require application by a healthcare professional, it has been stated that there is no such requirement for contraceptive tape (Smallwood et al., 2001).

Subcutaneous Implants

Subcutaneous implants are the most effective and long-term family planning method. In our country, Norplant®, consisting of six capsules, with a usage period of 5 years, and Implanon®, consisting of a single rod, with a usage period of 3 years, are the existing implant systems (Gönenç, 2007; Sağlık Bakanlığı, 2009). In the studies, it has been determined that there is an improved health and physical role status in individuals who use implants, and that it does not have a negative effect on libido and sexual function (Di Carlo et al., 2014; Visconti et al., 2012).

Barrier Methods

It is one of the protective methods called cover, hood, rubber, but known as condom or condom in the world. This protector, which is put on the penis in men, prevents the semen from reaching the ovary by staying in the condom during ejaculation. Although the risk of failure varies according to the cultural level of the users, the state of not wanting a child or delaying the desire for a child, and the age of the users, it is around 12-13% on average (Sağlık Bakanlığı, 2009; CETAD, 2007).

The fact that it reduces sexual pleasure, causes loss of sensitivity, the taste and smell of the product, and the fact that it is a barrier that divides sexual intercourse prevent regular use of latex condom by couples. It is also estimated that when used correctly and regularly, it reduces the risk of HIV by 97.1%. The female condom does not change the vaginal flora, does not cause skin irritation, allergic reactions and vaginal trauma. The female condom can be inserted up to 8 hours before intercourse in a similar way to a tampon (CETAD, 2007).

Studies have shown that the female condom provides a high level of sexual comfort and better lubrication compared to the male condom due to adequate lubricant, a low risk of rupture, especially during rough sex; the ability to adapt to all penis sizes; decreased sexual encounter due to the ability to insert before intercourse; increased protection of the outer labia; absence of side effects; increased protection from pregnancy and sexually transmitted infections (STIs)/HIV; female-controlled use; the probability of an allergic reaction is low compared to the male condom; It draws attention to positive features such as relaxation and an increase in the ability to enjoy sex (Mack, Grey, Amsterdam, Williamson & Matta, 2010; Mathenjwa & Maharaj, 2012).

Spermicides

Spermicides are chemical agents that are applied to the vagina 10-15 minutes before coitus, preventing sperm movement and causing the death of sperm. There are types such as aerosol, cream, gel, paste, suppository, foam, tablet, film and sponge. Its effectiveness varies depending on its availability, easy or difficult. Effectiveness 94%; the failure rate at 1 year has been reported as 0.3% for the foam suppositories and 31% for the foam (Sağlık Bakanlığı, 2009).

Intrauterine Device

It is a flexible device made of plastic and metal with different shapes and inserted into the uterine cavity. There are two forms: Copper and Hormone intrauterine devices (IUDs). By immobilizing the sperm, it prevents their progression to the fallopian tubes, accelerates the passage of the ovum through the fallopian tubes, inhibits fertilization, causes lysis of the blastocyst with foreign body response and prevents implantation. It also increases local prostaglandin

production; those containing progestin thicken cervical mucus. The efficacy of intrauterine devices has been reported to be more than 99% (WHO, 2019). Although studies have reported that there are changes in menstrual bleeding after placement in the intrauterine cavity, it has been determined that there is no negativity in terms of psychological and sexual (Enzlin et al., 2012).

Female Sterilization

By surgically closing the fallopian tubes, sperm are prevented from reaching the ovum. Since it is a permanent method, it is suitable for couples who do not want more children and for women whose pregnancy will endanger their life. There are no known side effects. It does not affect the menstrual cycle and sexual intercourse. In studies evaluating the effect of tubing on sexuality, it has been reported that the menstrual cycle interval, the severity and duration of bleeding, the degree of pelvic pain and sexual satisfaction were not affected, but there was a decrease in the frequency of sexual intercourse and a significant decrease in libido (Dias et al., 2014).

Male Sterilization

It is defined as the permanent prevention of sperm from entering the semen (ejaculate) by closing the vas deferens with a simple surgical intervention performed under local anesthesia, and its effectiveness has been reported as 99.8%. In studies evaluating the effect of my vasectomy on sexual life and couples' satisfaction, it was reported that no adverse events were experienced in sexual function, desire, arousal, orgasm and satisfaction (Al-Ali et al., 2014).

As a result, as stated in the "Reproductive Rights and Sexual Rights Declaration's (art. 8), all women; They have the right to access accessible, acceptable and useful information, training and services for a price they can pay for the protection of reproductive health, the provision of safe maternity and, when necessary, the safe termination of pregnancy. In the light of this information, health workers should be providing access to the service by using their informative roles.

Conflict of interest

There is no conflict of interest.

Sources of funding

The author did not receive any financial support for the review article, authorship and/or publication of this article.

Peer-review

Externally peer-reviewed.

Author Contributions

E.S.B.: Design, Literature Review, Writing - Original draft.

References

Al-Ali, B. M., Shamloul, R., Ramsauer, J., Bella, A. J., Scrinzi, U., Treu T., & Jungwirth A. (2014). The effect of vasectomy on the sexual life of couples. *Journal of Sexual Medicine*, 11, 2239–2242.

Battaglia, C., Battaglia, B., Mancini, F., Busacchi, P., Paganotto, M. C., Morotti, E., & Venturoli, S. (2012). Sexual behavior and oral contraception: A pilot study. *Journal of Sexual Medicine*, 9, 550–557.

Braun, V. (2013). Proper sex without annoying things: Anti-condom discourse and the "nature" of (hetero) sex. *Sexualities*, 16, 361–382.

Bozdemir, N., & Özcan, S. (2011). Cinselliğe ve cinsel sağlığa genel bakış. *Turkish Journal of Family Medicine and Primary Care*, 5(4), 37-46.

Caruso, S., Cianci, S., Malandrino, C., Cicero, C., Lo Presti, L., & Cianci, A. (2014). Quality of sexual life of women using the contraceptive vaginal ring in extended cycles: Preliminary report. *European Journal of Contraception and Reproductive Health Care*, 19, 307–314.

CETAD. (2007). Güvenli cinsellik bilgilendirme dosyası. Cinsel Eğitim Tedavi ve Araştırma Derneği. <https://www.cetad.org.tr/CetadData/Books/32/4-bilgilendirme-dosyasi-basin-bulteni-23-ocak-2007-istanbul.pdf> adresinden erişildi. Erişim tarihi: 08.09.2021.

Dias, D. S., Dias, R., Nahás-Neto, J., Nahás, E. A., Leite, N. J., Bueloni-Dias, F. N., & Modotti, W. P. (2014). Clinical and psychological repercussions of videolaparoscopic tubal ligation: Observational, single cohort, retrospective study. *Sao Paulo Medical Journal*, 132, 321–331.

Di Carlo, C., Sansone, A., De Rosa, N., Gargano, V., Tommaselli, G. A., Nappi, C., & Bifulco, G. (2014). Impact of an implantable steroid contraceptive (etonogestrel-releasing implant) on quality of life and sexual function: A preliminary study. *Gynecological Endocrinology*, 30, 53–56.

Enzlin, P., Weyers, S., Janssens, D., Poppe, W., Eelen, C., Pazmany, E., & Amy, J. J. (2012). Sexual functioning in women using levonorgestrel-releasing intrauterine systems as compared to copper intrauterine devices. *Journal of Sexual Medicine*, 9, 1065–1073.

Gabalci, E., & Terzioğlu, F. (2010). The effect of family planning methods used by women of reproductive age on their sexual life. *Sexuality and Disability*, 28(4), 275-285.

Graham, C. A., Bancroft, J., Doll, H. A., Greco, T., & Tanner, A. (2007). Does oral contraceptive-induced reduction in free testosterone adversely affect the sexuality or mood of women? *Psychoneuroendocrinology*, 32, 246–255.

Kızılkaya Beji, N., & Partovi Meran, H. (2017). *Kadın Sağlığına Genel Bakış* (N. Kızılkaya Beji, Ed.). *Kadın Sağlığı ve Hastalıkları* (s.12-102). İstanbul: Nobel Tıp Kitabevleri.

Kocaöz, S., Peksoy, S., & Atabekoğlu, C. S. (2013). Kadınların gebelikten önce kullandığı ve doğum sonrası dönemde kullanmayı tercih ettiği kontraseptif yöntemler. *Balkesir Sağlık Bilimleri Dergisi*, 2(1), 1-8.

Kodaz, N. D., Altuntuğ, K., & Ege, E. (2018). Aile Planlaması Yöntemlerinde Güncel Gelişmeler. *Kadın Sağlığı Hemşireliği Dergisi*, 4(1), 109–130.

Newman, K., & Helzner, J. F. (1999). IPPF Charter on Sexual and Reproductive Rights. *Journal of Women's Health & Gender-Based Medicine*, 8(4), 459-463.

Gönenç, I. (2007). *İmplant kullanıcılarının memnuniyet durumları ve karşılaştıkları yan etkiler* (Uzmanlık Tezi). Haydarpaşa Numune Eğitim ve Araştırma Hastanesi, İstanbul.

Öztürk, H., Çeber, E., Karaca Saydam, B., & Soğukpınar, N. (2004). Doğum kontrol yöntemleri ve yenilikler. *Hemşirelikte Araştırma Geliştirme Dergisi*, 6(1), 86-97.

Pastor, Z., Holla, K., & Chmel, R. (2013). The influence of combined oral contraceptives on female sexual desire: A systematic review. *European Journal of Contraception and Reproductive Health Care*, 18, 27–43.

Sabatini, R., & Cagiano, R. (2006). Comparison profiles of cycle control, side effects, and sexual satisfaction of three hormonal contraceptives. *Contraception*, 74, 220–223.

Sağlık Bakanlığı. (2009). Aile planlaması danışmanlığı katılımcı kitapçığı. T.C. Sağlık Bakanlığı Ana Çocuk Sağlığı ve Aile Planlaması Genel Müdürlüğü. file:///C:/Users/tr/Downloads/_Ekutuphane_kitaplar_a%C3%A7sa_p36.pdf adresinden erişildi. Erişim tarihi: 23.08.2021.

Smallwood, G. H., Meador, M. L., Lenihan Jr, J. P., Shangold, G. A., Fisher, A. C., Creasy, G. W., & Ortho Evra/Evra 002 Study Group. (2001). Efficacy and safety of a transdermal contraceptive system. *Obstetrics & Gynecology*, 98(5), 799-805.

- Strufaldi, R., Pompei, L. M., Steiner, M. L., Cunha, E. P., Ferreira, J. A., Peixoto, S., & Fernandes, C. E. (2010). Effects of two combined hormonal contraceptives with the same composition and different doses on female sexual function and plasma androgen levels. *Contraception*, *82*,147–154.
- Mack, N., Grey, T. G., Amsterdam, A., Williamson, N., & Matta, C. I. (2010). Introducing female condoms to female sex workers in Central America. *International Perspectives on Sexual and Reproductive Health*, *36*,149–156.
- Mathenjwa, T., & Maharaj, P. (2012). Female condoms give women greater control: A qualitative assessment of the experiences of commercial sex workers in Swaziland. *European Journal of Contraception and Reproductive Health Care*, *17*, 383–392.
- Visconti, F., Zullo, F., Marra, M. L., De Masellis, G., Caiazza, M., Cibarelli, F., ... & Guida, M. (2012). A new long-term reversible contraception method: sexual and metabolic impact. *Translational Medicine@ UniSa*, *4*, 86.
- World Health Organization (WHO). (2019). Defining sexual health. Retrieved January 30, 2019, from https://www.who.int/reproductivehealth/topics/sexual_health/sh_definitions/en/ adresinden erişildi. Erişim tarihi: 10.09.2021.